# Memory Module Specification

## KHX8500D2K2/1G

### *1GB (512MB 64M x 64-Bit x 2 pcs.)*
### *PC2-8500 CL5 240-Pin DIMM Kit*

## DESCRIPTION:

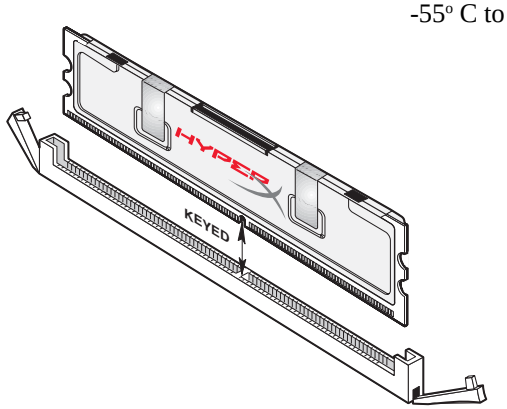
Kingston's KHX8500D2K2/1G is a kit of two 64M x 64-bit (512MB) DDR2-1066 CL5 SDRAM (Synchronous DRAM) memory modules, based on eight 64M x 8-bit DDR2 FBGA components per module. Total kit capacity is 1GB (1024MB). Each module pair has been tested to run at DDR2-1066MHz at a latency timing of 5-5-5-15 at 2.2V. The SPD is programmed to JEDEC standard latency 800Mhz timing of 5-5-5-15 at 1.8V. Each 240-pin DIMM uses gold contact fingers and requires +1.8V. The electrical and mechanical specifications are as follows:

## FEATURES:

- ☑ Power supply : Vdd: 1.8V ± 0.1V, Vddq: 1.8V ± 0.1V
- ☑ Double-data-rate architecture; two data transfers per clock cycle
- ☑ Bidirectional data strobe(DQS)
- ☑ Differential clock inputs(CK and CK)
- ☑ DLL aligns DQ and DQS transition with CK transition
- ☑ Programmable Read latency 5 (clock)
- ☑ Burst Length: 4, 8 (Interleave/nibble sequential)
- ☑ Programmable Burst type (sequential & interleave)
- ☑ Timing Reference: 5-5-5-15 at +1.8V / 5-5-5-15 at +2.2V
- ☑ Edge aligned data output, center aligned data input
- ☑ Auto & Self refresh, 7.8us refresh interval (8K/64ms refresh)
- ☑ Serial presence detect with EEPROM
- ☑ High Performance Heat Spreader
- ☑ PCB : Height 1.180" (30.00mm), single sided component

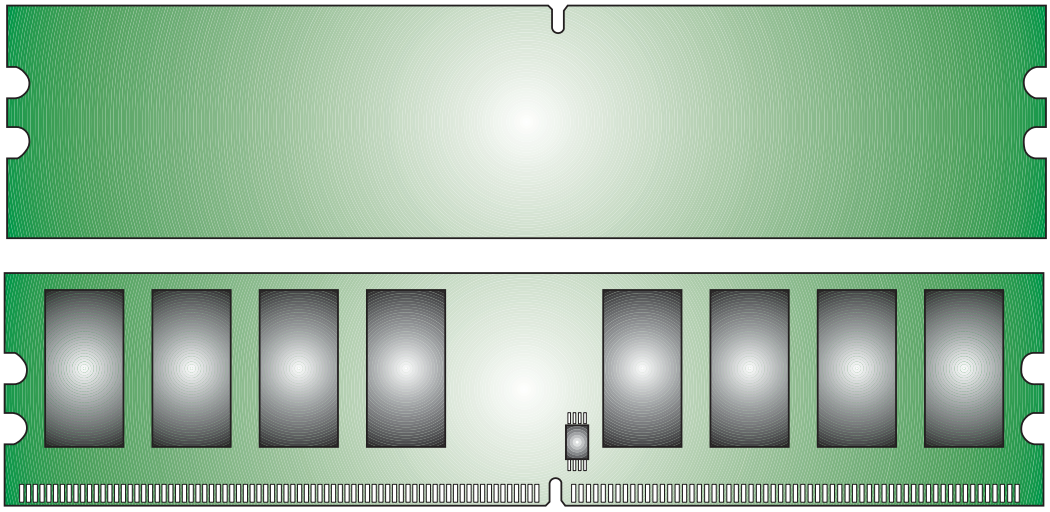
## PERFORMANCE:

| | |
|---|---|
| ☑ Clock Cycle Time (tCK) CL=5 | 2.5ns (min.) / 8ns (max.) |
| ☑ Row Cycle Time (tRC) | 51.5ns (min.) |
| ☑ Refresh to Active/Refresh Command Time (tRFC) | 105ns |
| ☑ Row Active Time (tRAS) | 39ns (min.) / 70,000ns (max.) |
| ☑ Single Power Supply of | +1.8V (+/- .1V) |
| ☑ Power | 2.682 W (operating per module) |
| ☑ UL Rating | 94 V - 0 |
| ☑ Operating Temperature | 0° C to 55° C |
| ☑ Storage Temperature | -55° C to +125° C |

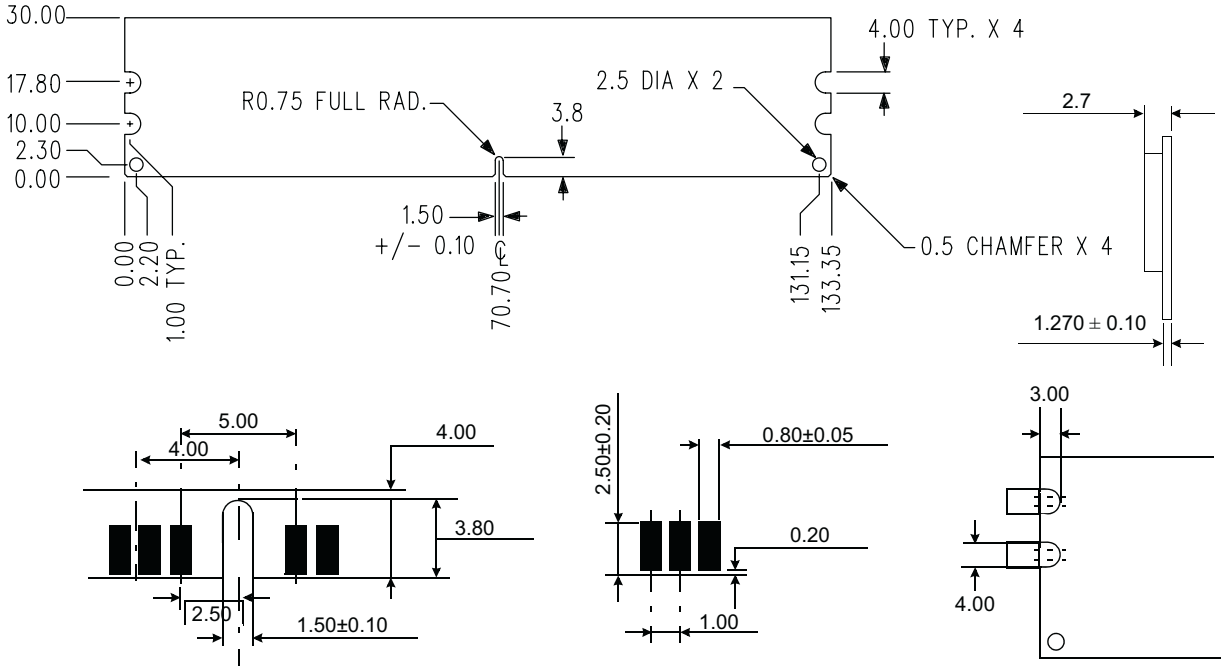



Preliminary

## MODULE DIMENSIONS:



Units: millimeters

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